



## ASSESSMENT OF DUAL ANTIPLATELET RESPONSIVENESS WITH THE POINT-OF-CARE DEVICE VERIFYNOW AFTER PERCUTANEOUS CORONARY INTERVENTION IN ELDERLY PATIENTS ( $\geq 75$ YEARS)

ACC Poster Contributions

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**Objectives:** To evaluate aspirin and clopidogrel responsiveness after percutaneous coronary intervention (PCI) in elderly patients and to assess the evolution of this response 5 weeks later.

**Background:** Dual antiplatelet therapy with aspirin and clopidogrel is the cornerstone of treatment after PCI. The state of dual antiplatelet responsiveness is not well known especially in elderly patients.

**Methods:** We prospectively enrolled 81 consecutive elderly patients ( $\geq 75$  years) who underwent PCI from January to December 2008. All patients were treated with aspirin and clopidogrel. We used VerifyNow aspirin assay and the VerifyNow clopidogrel P2Y<sub>12</sub> assay to measure in-hospital (T1) and 5 weeks later (T2) aspirin and clopidogrel responsiveness.

**Results:** Clopidogrel non-responders were noted in 37% patients at T1 and in 70% patients at T2. Aspirin non responders were found in 10% patients at T1 and in 14% patients at T2. Significant changes were observed from responders becoming non responders in clopidogrel treatment from T1 to T2 ( $p < 0.001$ ). Changes were noticed in both responders and non-responders for aspirin between T1 and T2 ( $p = 0.005$ ). Multivariate analysis revealed an increase of 1% hematocrit level to be independent predictor of clopidogrel non responsiveness at T1 (OR 0.85; 95% CI 0.75 to 0.96;  $p = 0.008$ ) and T2 (OR 0.88; 95% CI 0.77 to 1.00;  $p = 0.045$ ).

**Conclusions:** Changes in dual antiplatelet responsiveness between tests performed in-hospital and 5 weeks later were observed in elderly patients after PCI. Non responsiveness to clopidogrel was frequently noted after PCI, increased in chronic treatment and was dependent of hematocrit level.